Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A bone precursor composition, comprising:

a calcium cement and an injection vehicle ~~which is suitable for injection~~, wherein the calcium cement includes monobasic calcium phosphate monohydrate and beta-tricalcium phosphate in a ratio by weight of about 1:2 to about 1:3.75.

2. (Original) The composition of claim 1, further comprising calcium pyrophosphate and alpha-calcium sulfate hemihydrate.

3. (Canceled).

4. (Currently amended) The composition of claim 1, wherein the calcium cement is in the form of granules with a ~~diameter~~ of between about 1 to 500 μm inclusive.

5. (Currently amended) The composition of claim 4, further comprising ~~which includes or is conditioned with~~ cells.

6. (Original) The composition of claim 5, wherein the cells are tissue cells or mesenchymal cells.

7. (Original) The composition of claim 6, wherein the mesenchymal cells are connective tissue cells or bone cells.

8. (Currently amended) The composition of claim 7, wherein the connective tissue cells are selected from the group consisting of ligament cells, [[and]] chondrocytes and tendon cells.

9. (Original) The composition of claim 7, wherein the bone cells are selected from the group consisting of bone marrow stem cells, osteocytes, osteoblasts and osteoclasts.

10. (Original) The composition of claim 1, further comprising an injection vehicle.

11-14. (Canceled).

15. (Currently amended) The composition of claim 2, wherein said calcium cement comprises, by weight, ~~between~~ about 1 [[and]] to 5 percent calcium pyrophosphate, ~~between~~ about 5 [[and]] to 15 percent alpha-calcium sulfate hemihydrate, ~~between~~ about 5 [[and]] to 25 percent monobasic calcium phosphate monohydrate and ~~between~~ about 55 [[and]] to 75 percent beta-tricalcium phosphate.

16. (Original) The composition of claim 1, further comprising a therapeutic or analgesic agent.

17. (Canceled).

18. (Currently amended) The composition of claim 1, further comprising macromolecules necessary for cell growth, morphogenesis, differentiation [[and]] or tissue building.

19. (Original) The composition of claim 18, wherein the macromolecules are in the form of extracellular matrix particulates.

20. (Currently amended) The composition of claim 19, wherein the extracellular matrix particulates comprise ~~between~~ about 0.05 to 20 weight percent of the composition when dry.

21. (Original) The composition of claim 1, further comprising pore-generating particles.

22. (Currently amended) The composition of claim 21, wherein said pore-generating particles are selected from the group consisting of gelatin, [[and]] calcium sulfate, [[or]] and mixtures thereof.

23. (Currently amended) A bone precursor composite, comprising:

a calcium cement; and

a biopolymer structure,[[.]]

wherein the calcium cement includes monobasic calcium phosphate monohydrate and beta-tricalcium phosphate in a ratio by weight of about 1:2 to 1:3.75.

24. (Original) The composite of claim 23, wherein said biopolymer structure is collagen.

25. (Original) The composite of claim 24, wherein the collagen is fetal porcine collagen.

26. (Original) The composite of claim 23, wherein the biopolymer structure is a sponge or a single density foam.

27. (Previously Amended) The composite of claim 23, wherein the biopolymer structure is at least one fiber.

28. (Currently amended) The composite of claim 23, wherein the biopolymer structure is a biopolymer [[matt]] mat.

29. (Original) The composite of claim 23, wherein the biopolymer structure is a double density foam.

30. (Previously Amended) The composite of claim 23, wherein the biopolymer structure is a composite of a biopolymer structure and at least a second structure capable of forming a composite.

31. (Original) The composite of claim 23, wherein the biopolymer foam and/or the calcium cement includes or is conditioned with cells.

32. (Original) The composite of claim 31, wherein said composition is mechanically conditioned.

33. (Currently amended) A bone precursor composition, comprising:

a calcium cement; and

acid or pepsin extracted collagen,[[.]]

wherein the calcium cement includes monobasic phosphate monohydrate and beta-tricalcium phosphate in a ratio by weight of about 1:2 to 1:3.75.

34. (Original) The composition of claim 33, wherein the collagen is in the form of lyophilized collagen.

35. (Original) The composition of claim 33, wherein the collagen is microfibrillar collagen.

36. (Original) The composition of claim 33, wherein the calcium cement includes calcium salts selected from the group consisting of calcium pyrophosphate, alpha-calcium sulfate hemihydrate, monobasic calcium phosphate monohydrate, beta-tricalcium phosphate, and mixtures thereof.

37. (Original) The composition of claim 34, wherein the collagen comprises between about 0.1 to 2.5 weight percent of the composition when dry.

38. (Canceled).

39. (Currently amended) The composition of claim 33, wherein the calcium cement is in the form of granules with a diameter of ~~between~~ about 1 to 500 μm inclusive.

40. (Currently amended) A method for preparing an injectable bone precursor composition, comprising combining calcium pyrophosphate, alpha-calcium sulfate hemihydrate, monobasic calcium phosphate monohydrate and beta-tricalcium phosphate, such that an injectable bone precursor composition is prepared, wherein the calcium cement includes monobasic monohydrate and beta-tricalcium phosphate.

41. (Canceled).

42. (Currently amended) The method of claim 40, further comprising the step of producing the bone precursor composition as granules of reacted, hardened cement having a diameter of ~~between~~ about 1 to 500 μm inclusive.

43. (Original) The method of claim 40, further comprising the step of contacting the bone precursor composition with a neutralizing solution such that a neutralized bone precursor composition is prepared.

44. (Currently amended) The method of claim 43, wherein the neutralizing solution is selected from the group consisting of 3-[cyclobexylamino]-1-propanesulfonic acid ~~CAPS~~, triethanolamine, N-tris[hydroxymethyl]methyl-2-aminoethanesulfonic acid ~~TES~~, tricine, N-2-hydroxy[ethyl]piperazine-N^1-[2-ethanesulfonic acid] ~~HEPES~~, glycine, phosphate buffer solution, *bis* tris propane, N-tris[hydroxymethyl]methyl-3-aminopropane sulfonic acid ~~TAPS~~, 2-amino-2-methyl-1-propanol ~~AMP~~ and tris[hydroxymethyl]aminomethane ~~TRIS~~.

45. (Original) The method of claim 43, wherein the neutralizing solution is tribasic sodium phsphate.

46. (Currently amended) A method for producing or repairing connective tissue in a subject, comprising administering an injectable bone precursor composition to the subject, wherein the injectable bone precursor composition comprises calcium pyrophosphate, calcium sulfate hemihydrate, monobasic calcium phosphate monohydrate and beta-tricalcium phosphate, wherein the ratio by weight of monobasic calcium phosphate monohydrate to beta-tricalcium phosphate is about 1:2 to 1:3.75.

47. (Canceled).

48. (Original) The method of claim 46, wherein the bone precursor composition is in the form of granules with a diameter of between about 1 to 500 μm inclusive.

49. (Currently amended) The method of claim 46, wherein the bone precursor composition further comprises ~~includes or is conditioned with~~ cells.

50. (Original) The method of claim 46, wherein the cells are tissue cells or mesenchymal cells.

51. (Original) The method of claim 46, wherein the bone precursor composition further comprises an injection vehicle.

52. (Original) The method of claim 46, wherein the bone precursor composition further comprises a biopolymer structure.

53. (Currently amended) The method of claim 46, wherein the bone precursor composition further comprises a therapeutic ~~and/or~~ or analgesic agent.

54. (Original) The method of claim 46, wherein the bone precursor composition further comprises acid or pepsin extracted collagen.

55. (Original) The method of claim 46, wherein the bone precursor composition further comprises extracellular matrix particulates.

56. (Original) The method of claim 46, wherein the bone precursor composition further comprises pore-generating particles.